

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An image forming apparatus, provided with a paper feed cassette and an image forming portion, that takes out a recording medium stored in this paper feed cassette sheet by sheet in response to an image forming request and performs image forming in the image forming portion, the image forming apparatus comprising:

a push-out means that can push out the paper feed cassette from an installed state toward an uninstalled state relative to the main body of the apparatus;

~~a warning means that can emit a warning that there is insufficient paper to a user who requested image forming;~~

a sheet quantity confirming means that can confirm the number of sheets of the recording medium stored in the paper feed cassette; and

a control means that causes the sheet quantity confirming means to confirm the number of sheets of the recording medium stored in the paper feed cassette when an image forming request has been ~~received~~made, and if the number of sheets of the recording medium stored in the paper feed cassette is lower than the number of sheets necessary to complete an image forming operation in accordance with ~~requested by~~ the image forming request, the control means causes the paper feed cassette to be pushed out from an installed state toward an uninstalled state by the push-out means without executing the image forming operation, and causes the user to be warned ~~by the warning means that the number of sheets of the recording medium is insufficient to complete the image forming operation in accordance with the image forming request.~~

2. (Currently Amended) The image forming apparatus according to claim 1, wherein ~~said image forming apparatus is configured to communicate with a terminal machine; wherein said image forming request has been received from said terminal machine; and wherein said warning is provided at the terminal machine when an image forming request has been received from a terminal machine through a network,~~ the control means lets the sheet quantity confirming means confirm the number of sheets of the recording medium stored in the paper-feed cassette, and if the number of sheets of the recording medium stored in the paper-feed cassette is lower than the number of sheets requested by the image forming request, the control means causes the paper-feed cassette to be pushed out from an installed state toward an uninstalled state by the push-out means without executing the image forming operation, and causes the user to be warned by the warning means that the number of sheets of the recording medium is insufficient.

3. (Currently Amended) The image forming apparatus according to claim 1, further comprising a paper storage board ~~that~~ supports a recording medium and moves to a lower position as the number of stored sheets of the recording medium increases;

wherein the sheet quantity confirming means confirms the number of sheets of the recording medium stored in the paper feed cassette by detecting the ~~a~~ height position of the paper storage board with a reflective optical sensor.

4. (Previously Presented) The image forming apparatus according to claim 1, wherein the paper feed cassette comprises:

a matching portion made of metal that extends in the vertical direction along the edge of the stored recording medium and matches the recording medium; and

a paper storage board made of metal that is movable along this matching portion in the vertical direction while contacting this matching portion and that moves to a lower position as the number of stored sheets of the recording medium increases;

wherein the sheet quantity confirming means lets a current flow from the paper storage board to the matching portion, and confirms the number of sheets of the recording medium stored in the paper feed cassette based on the electrical resistance from the paper storage

board to the matching portion, which changes according to the height position of the paper storage board.

5. (Previously Presented) The image forming apparatus according to claim 1, wherein the push-out means comprises:

an engaging mechanism that can switch between an engaged state and a released state of the paper feed cassette relative to the main body of the apparatus; and

a biasing portion that confers a biasing force on the paper feed cassette in the push-out direction; and wherein

when the number of sheets of the recording medium stored in the paper feed cassette is lower than the requested number of image forming sheets, the engaging mechanism puts the paper feed cassette in a released state relative to the main body of the apparatus.

6. (Currently Amended) The image forming apparatus according to claim 1, wherein the control means, immediately after an image forming request has been received, causes the sheet quantity confirming means to confirm the number of sheets of the recording medium stored in the paper feed cassette, and if the number of sheets of the recording medium stored in the paper feed cassette is lower than the number of sheets requested by the image forming request, the control means causes the paper feed cassette to be pushed out from an installed state toward an uninstalled state by the push-out means without executing the image forming operation, and causes the user to be warned by the warning means that the number of sheets of the recording medium is insufficient.

7. (New) An image forming apparatus, comprising:
a paper feed cassette configured to contain paper sheets;
a paper sheet quantifier configured to determine the number of paper sheets contained in the paper feed cassette;
an image forming portion configured to form an image on one or more of said paper sheets in response to an image forming request;

a control portion configured to cause, prior to execution of an image forming job in response to said image forming request, the provision of a warning that the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request;

wherein said image forming apparatus is further configured to withhold execution of said image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request.

8. (New) The image forming apparatus of claim 7, further comprising:

a paper feed cassette ejector configured to push out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of the apparatus;

wherein said control portion is further configured to cause, prior to execution of an image forming job in response to said image forming request, said paper feed cassette ejector to push out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of the apparatus.

9. (New) An image forming apparatus in combination with a terminal machine, comprising:

said image forming apparatus comprising:

a paper feed cassette configured to contain paper sheets;

a paper sheet quantifier configured to determine the number of paper sheets contained in the paper feed cassette;

an image forming portion configured to form an image on one or more of said paper sheets in response to an image forming request;

a control portion configured to cause, prior to execution of an image forming job in response to said image forming request, the provision of a warning at said terminal machine that the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request;

wherein said image forming apparatus is further configured to withhold execution of said image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request.

10. (New) An image-formation warning method comprising:

determining at an image forming apparatus a number of paper sheets contained in a paper feed cassette of said image forming apparatus;

providing, prior to execution of an image forming job in response to an image forming request, a warning at a terminal machine in communication with said image forming apparatus that the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request.

11. (New) The image-formation warning method of claim 10, further comprising:

prior to execution of an image forming job in response to an image forming request, pushing out the paper feed cassette from an installed state toward an uninstalled state relative to a main body of the apparatus.

12. (New) The image forming apparatus of claim 7, wherein:

said paper feed cassette comprises a movable paper storage board supporting said one or more paper sheets, wherein a position of the paper storage board is dependant upon the number of paper sheets contained in said paper feed cassette;

wherein said paper sheet quantifier comprises a reflective optical sensor configured to detect a height of said paper storage board;

wherein said reflective optical sensor comprises a light emitter and a light receiver;

wherein said light emitter is configured to emit light to be reflected from said paper storage board to said light receiver.

13. (New) The image forming apparatus of claim 7, wherein the paper feed cassette comprises:

a paper sheet quantifier comprising:

a metal portion of said paper feed cassette that extends in the vertical direction along an edge of said one or more paper sheets contained in said paper feed cassette;

a movable paper storage board supporting said one or more paper sheets, wherein a position of the paper storage board is dependant upon the number of paper sheets contained in said paper feed cassette;

wherein said paper storage board comprises metal and is movable along said portion in the vertical direction while contacting said portion;

wherein electrical resistance between the paper storage board and said metal portion is dependant upon a height position of the paper storage board; and

wherein said paper sheet quantifier is configured to permit a current flow from the paper storage board to said metal portion and to confirm the number of paper sheets contained in the paper feed cassette based on electrical resistance from the paper storage board to said metal portion.

14. (New) The image forming apparatus of claim 7, wherein said warning comprises a visual warning.

15. (New) The image forming apparatus of claim 7, wherein said warning comprises an auditory warning.

16. (New) The image forming apparatus of claim 7, wherein said warning comprises a visual warning and an auditory warning.

17. (New) The image forming apparatus of claim 7, wherein said control portion is further configured to withhold execution of said image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request.

18. (New) The image forming apparatus in combination with a terminal machine of claim 9, wherein said control portion is further configured to withhold execution of said image forming job if the number of paper sheets contained in the paper feed cassette is insufficient to complete said image forming job in response to said image forming request.

19. (New) The image forming apparatus of claim 1, further comprising a warning means configured to emit a warning that the number of sheets of the recording medium is insufficient to complete the image forming operation in accordance with the image forming request.